



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,556	06/26/2003	Thomas Vance Ballard	AUS920030476US1	7279

35525 7590 04/02/2007
IBM CORP (YA)
C/O YEE & ASSOCIATES PC
P.O. BOX 802333
DALLAS, TX 75380

EXAMINER

NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
----------	--------------

2134

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary**Application No.**

10/607,556

Applicant(s)

BALLARD, THOMAS VANCE

Examiner

Andrew L. Nalven

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/2/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-21, 23-33 and 35-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10, 12-17, 19-21, 23-30, 32, 33 and 35-38 is/are rejected.
- 7) ☒ Claim(s) 7, 18 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-10, 12-21, 23-33, and 35-38 are pending.

Response to Arguments

2. Applicant's arguments regarding the feature of "the electrical signal is indicative of a location" and arguments regarding the claimed timestamps are moot in view of the new grounds of rejection. Applicant's remaining arguments filed have been fully considered but they are not persuasive.

3. Applicant has argued that the rejection of claims 12-22 and 35 in view of 35 USC § 101 is unfounded. Examiner respectfully disagrees. The cited claims were rejected because the claimed computer readable medium can be interpreted in light of the specification to be an intangible communication media in the form of wired or wireless communication links, radio frequency communications, and light wave communications. Thus, the claims are directed towards a signal which is not a form of statutory invention. Applicant's highlight the *Interim Guidelines for Examination of Patent Application for Patent Subject Matter Eligibility*. The portions highlighted by Applicant clearly set forth that "it does not appear that...reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101." In addition, the cited portions set forth that "these interim guidelines propose that such signal claims are ineligible for patent protection." It appears from Applicant's remarks

Art Unit: 2134

that Applicant believes that the claims are not directed to a signal because the claims "are directed towards the medium," and not to the radio frequency or the light wave signals (Applicant's remarks, page 11). Applicant's interpretation fails because the specification defines the computer readable medium to include intangible media including wired or wireless communication links, radio frequency communications, and light wave communications. These media are in essence nothing more than air through which signals travel. The claims, when read in light of the specification, leave open the interpretation that they are directed towards a computer program product traveling through the air. This is not statutory because it is intangible and fails to fit into one of the four statutory classes of invention.

4. Further, the practical application requirement provides that a useful, concrete, and tangible result must be realized in order to meet § 101. When dealing with computer programs (functional descriptive material), functionality is realized when the computer program is embodied on a computer readable medium and it is claimed as being utilized by a computer system. The portions of the *Interim Guidelines for Examination of Patent Application for Patent Subject Matter Eligibility* provided by Applicant note this by stating "a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized." Claims 12-22 and 35 fail this requirement because no hardware components are claimed that execute the computer program product. Applicant's assertion that the computer program product is for use in a data

Art Unit: 2134

processing system fails to remedy this deficiency because the intended use of the program is irrelevant. Take the example of an audio compact disc. An audio compact disc is intended to be used in a CD player; however, claimed by itself it is not statutory because the audio compact disc is inoperative and provides no functionality. It is only when employed by a computer system or CD player that the functionality can be realized. Examiner suggests an amendment to include a computer system which executes the computer program product in order to meet the practical application requirement of § 101.

5. Applicant further argues on pages 12-14 that Aiu fails to teach, "permitting operation of the data processing device based on the comparison of the data of the data signal to the security information." Applicant asserts that Aiu instead teaches initially permitting operation and then later possibly restriction operation. Examiner notes that the claims as currently provided only require permitting operation based upon comparison of data. The claims do not require preventing all operation until comparison is successfully completed. Instead the only require permitting operation. This does not mean that there was no operation prior to the comparison step. As a result, Applicant's arguments fail because they are beyond the scope of the claimed invention. Aiu teaches permitting operation of the data processing device based on the comparison of the data of the data signal to the security information (Aiu, paragraphs 0035-0037) by teaching evaluating received allowance data to determine if operation of the device should be permitted and if operation is not permitted then forcing a shutdown (Aiu, paragraph 0037).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 12-22 and 35 are rejected under 35 U.S.C. 101 because the cited claims are directed towards a computer readable medium which has been defined by the specification to include transmission type media including digital and analog communication links, wired or wireless communication links, radio frequency communications, and light wave communications. Transmission type media are forms of signals which are not statutory subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2134

7. **Claims 1-2, 8-10, 12-13, 19-21, 23-26, 32-33, and 35-37 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Aiu et al US PGPub 2004/0003079 in view of McDonnell et al US PGPub 2002/0177449.

8. **With regards to claims 1, 12, 23, and 25**, Aiu teaches receiving an electrical signal having a data signal added therein (Aiu, paragraphs 0014-0015, receives and extracts allowances from remote server), extracting the data signal from the electrical signal (Aiu, paragraphs 0014-0015, receives and extracts allowances from remote server), comparing data of the data signal to security information stored in the data processing device (Aiu, paragraphs 0036-0037, compares received allowances to stored history), and permitting operation of the data processing device based on the comparison of the data signal to the security information (Aiu, paragraph 0037). Aiu fails to teach the electrical signal being indicative of the location of the data processing device. However, McDonnell teaches the electrical signal being indicative of the location of the data processing device (McDonnell, paragraphs 0067-0068, signals indicating the location of mobile device are used for authorization). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize McDonnell's method of utilizing location because it offers the advantage of allowing location aware services to be utilized that tailor services of a mobile device or client to the location that they are in (McDonnell, paragraph 0016-0017).

9. **With regards to claims 2, 13, 26, and 37**, Aiu as modified teaches the operation is one of power-up and boot-up of the device (Aiu, paragraph 0014).

10. **With regards to claims 8 and 19**, Aiu as modified teaches the security information from a security device associated with the data network (Aiu, paragraph 0015).
11. **With regards to claims 9, 20, and 32**, Aiu as modified teaches the data signal generated based on security information from a security device associated with the data structure (Aiu, paragraphs 0014-0015).
12. **With regards to claims 10, 21, and 33**, Aiu as modified teaches the data processing device being one of a computer, workstation, stored system, peripheral device, and a portable computing device (Aiu, paragraph 0011).
13. **With regards to claims 24 and 35-36**, Aiu as modified teaches everything described above regarding claim 1 and further teaches receiving an electrical signal from an external network (Aiu, paragraph 0019), adding a data signal to the electrical signal to generate a modified electrical signal wherein the signal includes security data (Aiu, paragraph 0019), and outputting the modified electrical signal to a local network (Aiu, paragraph 0017).
14. **Claims 3-4, 14-15, 27-28, and 38 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Aiu et al US PGPub 2004/0003079 and McDonnell et al US PGPub 2002/0177449, as applied to claims 1, 12, and 24 above, and in further view of Banavar et al US PGPub 2003/0187984.
15. **With regards to claims 3, 14, and 27**, Aiu as modified teaches storing a record of the data signal in a history data structure, wherein the history data structure includes

a data value of the data signal (Aiu, paragraph 0020, time restrictions), but fails to teach the data record including a timestamp. However, Banavar teaches the record including a timestamp (Banavar, paragraph 0104). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Banavar's timestamping method because it offers the advantage of helping to allow the grouping and indexing of stored data structures (Banavar, paragraph 0104).

16. **With regards to claims 4, 15, 28, and 38**, Aiu as modified as modified teaches receiving a data packet from a sending device via a data network wherein the data packet includes a first data value and a first timestamp associated with the first data value (Aiu, paragraph 0020), querying a history data structure for a second data value associated with a second timestamp in the history data structure based on the first timestamp (Aiu, paragraphs 0036-0037), comparing the second data value to the first data value (Aiu, paragraphs 0036-0037), and permitting processing of the data packet if the second data value matches the first data value (Aiu, paragraphs 0036-0037).

17. **Claims 5-6, 16-17, and 29-30 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Aiu et al US PGPub 2004/0003079, McDonnell et al US PGPub 2002/0177449, and Banavar et al US PGPub 2003/0187984, as applied to claims 4, 15, 28 above, and in further view of Goldman US PGPub 2003/0233418.

18. **With regards to claims 5, 16, and 29**, Aiu as modified teaches the comparison of the first data value to the second data value (Aiu, paragraphs 0036-0037), but fails to teach adding an identifier of the sending device to a list wherein if the second data value

Art Unit: 2134

matches the first data value, the the list is a list of authorized devices and wherein if the second data value does not match the list is a list of unauthorized devices. However, Goldman teaches adding an identifier of the sending device to a list wherein if the second data value matches the first data value, the list is a list of authorized devices and wherein if the second data value does not match the list is a list of unauthorized devices (Goldman, paragraphs 0094-0096, adding to authorized or unauthorized sender lists using stored contact lists). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Goldman's method of using authorized and unauthorized device lists with Aiu as modified because it offers the advantage of helping filter out unwanted messages and allow messages from authorized users or devices (Goldman, paragraphs 0005-0006).

19. **With regards to claims 6, 17, and 30**, Aiu as modified as modified teaches comparing an identifier of the sending device in at least one of the list of authorized devices and the list of unauthorized devices prior to querying the history data structure (Barrett, column 8 lines 50-59), automatically permitting the processing of the data packet if the identifier of the sending device is in the list of authorized devices (Barrett, column 8 lines 50-59), and automatically denying processing of the data packet if the identifier of the sending device is in the list of unauthorized devices (Barrett, column 8 lines 50-59).

Allowable Subject Matter

Art Unit: 2134

20. Claims 7 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

21. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and amended to overcome the rejection under 35 USC 101.

The following is a statement of reasons for the indication of allowable subject matter:

22. The cited prior art, Aiu et al US PGPub 2004/0003079 and Barrett US Patent No. 6,832,321, teach the deleting of particular entries in lists of authorized or unauthorized devices, but fails to specifically teach periodically clearing the list of authorized devices and the list of unauthorized devices. As such, the cited prior art fails to anticipate or render obvious the above-cited claims.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

24. Gibbs US Patent No. 6,615,348 discloses a method for an adapted digital signature.

Art Unit: 2134


25. Barzegar et al US Patent No. 5,559,520 discloses a method for acquiring location related information in a wireless network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571 272 3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrew Nalven



KAMBIZ ZAND
PRIMARY EXAMINER